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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,277	11/04/2003	Kazutaka Fukuda	FY.50739US0A	7037

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EXAMINER

SPISICH, GEORGE D

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/701,277

Applicant(s)

FUKUDA, KAZUTAKA

Examiner

George D. Spisich

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8, 9 and 11-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9, 11, 14-18 and 21 is/are rejected.
- 7) ☒ Claim(s) 12, 13, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities:

The amended paragraphs of the specification submitted in the response dated 9/21/06 appear to correct the issues objected to by the Examiner in the Office Action of 3/21/06, however the paragraph numbers used for the amendment, specifically [0063] and [0077], appear to be incorrect. Examiner understands these paragraphs to be [0060] and [0074] respectively.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 8-9 are unclear. It is unclear to define the mating surface as "positioned within a perimeter of the driven pulley" since the mating surface includes portions that are not within the perimeter of the driven pulley. Examiner suggests referring to this detail as "wherein a portion of the mating surface is positioned within a perimeter of the driven pulley".

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 9, 11 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Miguchi et al. (USPN 6,715,379).

Miguchi et al. (shown best in Fig. 5) discloses all terrain vehicle having a frame, an engine compartment defined within the frame, and engine mounted within the engine compartment, the engine comprising a crankcase, a transversely extending crankshaft, a transmission connected to the crankshaft, the transmission comprising a drive pulley (41,42), a driven pulley (55,54) including a fixed half (54) and a movable half (55), a spring (59) adapted to bias the movable half toward the fixed half, a transmission primary shaft connected to the drive pulley and coaxial to the crankshaft, and a transmission case (30) connected to the crankcase. The driven pulley connected to a transmission main shaft and the main shaft extends through a cavity in the crankcase and an opening in the transmission case.

The crankcase has an open cavity that provides space for the spring to be disposed therein. The transmission chamber provided within the cavity of the transmission case corresponds with the spring cavity through an opening (the open side

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of the transmission case) in the transmission case. The spring is at least partially positioned within the cavity and the spring is positioned such that at least one-third of the spring is within the cavity.

The spring cavity is isolated from a crank chamber by a main shaft supporting wall (near reference number 28).

There is a clutch dividing wall having a cylindrical protuberance and air-cooling fins (on the left side of drive pulley half 41) extending from a surface of the drive pulley facing the clutch dividing wall, wherein the air-cooling fins overlap the cylindrical protuberance in a direction along a longitudinal axis of the vehicle.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Izumi (USPN 6,269,899) in view of Miguchi et al. (USPN 6,715,379).

Izumi (shown best in Figs. 4 and 5) discloses all terrain vehicle having a frame, an engine compartment defined within the frame, and engine mounted within the engine compartment, the engine comprising a crankcase (120), a transversely extending crankshaft, a transmission connected to the crankshaft, the transmission comprising a drive pulley (192,202), a driven pulley (242,236) including a fixed half (236) and a

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movable half (242), a spring (250) adapted to bias the movable half toward the fixed half, a transmission primary shaft connected to the drive pulley and coaxial to the crankshaft, a transmission case (148) connected to the crankcase (120), a mating surface (near 150) between the crankcase and the transmission case positioned within a perimeter of the driven pulley (as the end portion of the mating surface is inside the outer perimeter of the driven pulley). The mating surface defines a plane substantially perpendicular to an axis of the crankshaft, and the drive belt (184) is disposed on a first side of the plane and at least a portion of the spring (250) is disposed on a second side of the spring. The driven pulley connected to a transmission main shaft and the main shaft extends through a cavity in the crankcase and an opening in the transmission case.

The crankcase is an open cavity that provides space for the spring to be disposed therein. The transmission chamber provided within the cavity of the transmission case is in communication with the spring cavity through an opening (the open side of the transmission case) in the transmission case. The spring is at least partially positioned within the cavity and the spring is positioned on each side of the plane defined by the mating surface.

The spring cavity is isolated from a crank chamber by a main shaft supporting wall (149).

The transmission case is connected to the crankcase by a number of bolts (150) such that "at least a portion" of the bolts are disposed with the perimeter of the movable half of the driven pulley.

There is a clutch dividing wall (159) having a cylindrical protuberance (172) and air-cooling fins (198) extending from a surface of the drive pulley facing the clutch dividing wall, wherein the air-cooling fins overlap the cylindrical protuberance in a direction along a longitudinal axis of the vehicle.

Although it may be argued that at least "about" one-third of the spring is on the second side of the plane (on the opposite side of the drive belt), Examiner is addressing this claimed detail by other means.

Miguchi et al. discloses a similar engine/transmission arrangement having a moving driven pulley half that is urged by a spring. This spring has at least about a third (essentially the entire spring portion) within the cavity defined within the crankcase and on the opposite side of the plane from the drive belt.

Therefore, the relationship between the positioning of the spring, the length of the spring and the ratio of the spring on first and second sides of a plane are taught by both Izumi and Miguchi et al. so as to overlap the plane, as taught by Izumi and have at least one third of the spring on a side of the plane opposite the drive belt, as taught by Miguchi et al.

It would be obvious to one of ordinary skill in the art and an obvious design choice to provide the spring of Izumi to be at least about one third on an opposite side of the plane that the drive belt as taught by Miguchi et al.

***Allowable Subject Matter***

Claims 1-6 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 12,13,19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments with respect to claim 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Since Applicant has amended claims as previously deemed allowable by the Examiner, this Office Action is Non-Final.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George D. Spisich whose telephone number is (571) 272-6676. The examiner can normally be reached on Monday-Friday 9:00 to 6:30 except alt. Friday.

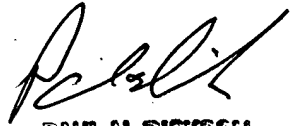
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

George D. Spisich  
December 9, 2006



12/11/06  
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